

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027976**Date Inspected:** 12-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** Scott Kortem**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**Ultrasonic Testing (Tower ESW-"G" from Y=4000~4900 Face B)**

This QAI performed 100% Joint Ultrasonic Testing (UT), together with ABF QC inspector Scott Kortum, on the Tower Complete Joint Penetration (CJP) Tee joint shear plate connection designated as ESW- S-045 "G" from Face B. The QA/QC joint inspection on this date was performed in accordance AWS D1.5-2002, section 6, table 6. 4 and supplemental UT procedure SE-UT-D1.5-CT-108-ESW-R5. Due to the presence of weld reinforcement the QAI was unable to size the length and measure the "X" location on the welds in way of the indications observed that were oriented transverse to the weld.

The results of the QA/QC joint inspection are as follows;

**Rejectable Planar Longitudinal Indications (Y=4000~4900)**

Y=4360, X= -10, Sound Path=144, Depth from A=10, Length 440, +0 db Rating

**Recordable Planar Longitudinal Indications (4000~4900)**

Y=4030, X= -3, Sound Path=125, Depth from A=15, Length 20, +4 db Rating

Y=4830, X= -5, Sound Path=116, Depth from A=18, Length 50, +2 db Rating

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### Transverse Indications (Y=4000~4900)

Y=4020, Sound Path=118, Depth from Face A=18, AWS db Rating = +9  
Y=4060, Sound Path=115, Depth from Face A=19, AWS db Rating = +18  
Y=4090, Sound Path=108, Depth from Face A=21, AWS db Rating = +19  
Y=4110, Sound Path=103, Depth from Face A=23, AWS db Rating = +12  
Y=4125, Sound Path=133, Depth from Face A=13, AWS db Rating = +11  
Y=4160, Sound Path=95, Depth from Face A=26, AWS db Rating = +16  
Y=4200, Sound Path=91, Depth from Face A=27, AWS db Rating = +18  
Y=4300, Sound Path=91, Depth from Face A=27, AWS db Rating = +12  
Y=4440, Sound Path=99, Depth from Face A=25, AWS db Rating = +10  
Y=4490, Sound Path=109, Depth from Face A=21, AWS db Rating = +12  
Y=4540, Sound Path=103, Depth from Face A=23, AWS db Rating = +18  
Y=4570, Sound Path=108, Depth from Face A=21, AWS db Rating = +4  
Y=4670, Sound Path=111, Depth from Face A=20, AWS db Rating = +18  
Y=4790, Sound Path=84, Depth from Face A=30, AWS db Rating = +17  
Y=4810, Sound Path=116, Depth from Face A=18, AWS db Rating = +8  
Y=4860, Sound Path=139, Depth from Face A=10, AWS db Rating = +11  
Y=4890, Sound Path=102, Depth from Face A=23, AWS db Rating = +8

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Patterson,Rodney	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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